Kesslerloch near Thayingen and other caves, descriptive notes on the several figured specimens of stone, antler, bone, &c., and discussions as to the relative and positive dates of the Cave-dwellers complete the memoir.

The author thinks 4000 years a sufficient period to allow of the habitation of the cave, after the lowest bed with Mammoth-bones had been washed in and the waters drained off, and for the formation of the bed with flint knives and hearth-stuff and subsequent accumulations.

The plates illustrate:—flint-cores and flakes, the latter mostly simple, rarely dressed or worked; simply pointed harpoon-heads, of various patterns and ornament; bone chisels; eyed needle, simple awls and piercers, rippers and smoothers, made of antler; perforated ornaments or charms of wood, shell, and bone; cut antlers; a piece of elephant-bone, and a portion of a human skull fractured by a blunt implement; also a view of the Rosenhalde and diagrams of the cave and its deposits.

Recherches pour servir à l'Histoire Naturelle des Mammifères, comprenant des Considérations sur la Classification de ces Animaux par M. H. Milne-Edwards, *des Observations sur l'Hippopotame de Liberia et des Etudes sur la Faune de la Chine et du Thibet orientale par* M. Alphonse Milne-Edwards. Tome premier: Texte. Tome second: Atlas, 105 planches. 4to. Paris, 1868 à 1874.

M. Milne-Edwards proposes another scheme for the arrangement of the Mammalia. Like all these schemes, it contains some good points and shows some affinities; but these multitudes of arrangements are of great detriment to the progress of science.

M. Alphonse Milne-Edwards gives a good figure of the Liberian hippopotamus from life, a figure of its skeleton, and details of its skull, brain, &c., the two latter showing that Morton was quite right in regarding this animal as a distinct species and genus from the common hippopotamus, of which some zoologists consider it only a pygmy race.

M. Alphonse Milne-Edwards describes and figures the following new forms of Mammalia from China and Thibet:—

1. *Rhinopithecus Roxellanæ.* A monkey with a slightly elongate recurved nose, from Eastern Thibet.
2. *Ailuropus melanoleucus.* A large black-and-white bear with a very short broad head, from Thibet.
3. *Scaptochirus moschatus.* A genus allied to the mole, from Mongolia.
4. *Nyctogale elegans.* An iridescent water-Insectivore.
5. *Scaptonyx fusicaudatus*; 6. *Uropsilus soricipes*; and 7. *Anourosorex squamipes.* Allied to the shrewmice.

Besides these, he figures and describes, almost all as new:—two

species of *Macacus*, one of *Rhinolophus* (for which he gives a name previously used by Hodgson), one *Vespertilio*, and two species of *Murina*, six of *Felis*, five of *Putorius*, and three of *Meles*, regarding a new species of *Arctonyx* as belonging to this genus; one species of *Talpa*, two of *Sorex*, and one of *Crocidura*; four species of *Siphneus*, three of *Gerbillus*, three of *Cricetus*, two of *Arvicola*, three of *Pteromys*, two of *Sciurus*, one of *Arctomys*, and one of *Spermophilus*; eight species of *Mus*, one of *Rhizomys*, and one of *Lagomys*; four species of *Antilope* of the subgenus *Nemorhedus*, one *Budorcas*, one *Ovis*; three species of *Cervus* (one of which he refers to a new subgenus that he calls *Elaphodes*), one *Cervulus*, one *Moschus*, and one *Sus*. All these constitute a very valuable contribution to Eastern zoology. J. E. G.

PROCEEDINGS OF LEARNED SOCIETIES.

ROYAL SOCIETY.

December 10, 1874.—Joseph Dalton Hooker, C.B., President, in the Chair.

"On the Development of the Teeth of the Newt, Frog, Slowworm, and Green Lizards." By Charles S. Tomes, M.A.

That the "papillary stage" of tooth-development could not be said to exist at any time either in the frog or in certain fish, was pointed out nearly twenty years ago by Professor Huxley, who, however, accepted, on the authority of Goodsir, the latter's theory of the process as true of Man and Mammalia. In more recent years Kölliker and Waldeyer have traced out the course of the development of teeth with great accuracy in Man and some other Mammalia, with the result of showing that the usually accepted views propounded by Goodsir and Arnold are not by any means an accurate representation of what takes place in them.

Since the date of the publication of Professor Huxley's paper, I am not aware that any thing has been published bearing upon the development of the teeth of Reptilia and Batrachia, save a paper by Dr. Lionel Beale upon the development of the teeth of the Newt, and a short and inconclusive paper by Santi Sirena; with the exception of the papers alluded to, the subject may be taken to stand in the position which it occupied at the time of the publication of Professor Owen's 'Odontography,' in which we are told that the teeth-germs of Reptiles and Batrachia never stop at the papillary stage, but that the primitive dental papilla sinks into the substance of the gum and becomes inclosed by a capsule.